

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheets" of drawings includes changes to Figures 1 and 3. The attached "Replacement Sheets," which includes Figures 1 and 3, replaces the original sheets including Figures 1 and 3.

REMARKS

Claims 1-4, 7-14, 17 and 20-26 are now pending in the application. Claims 1, 8, 10 are amended in response to the Examiner's comments on pages 2-3 of the outstanding Office action, specifically by replacing the phrase, "taking the difference of every pair of two consecutive samples ... without performing manipulation across pairs," with the phrase, "taking the difference of only every other pair of two consecutive samples." Support for these amendments can be found in the originally filed specification at paragraph [0021], especially as amended herein to correct the statement of incorporation by reference and insert the material previously incorporated by reference. Thus, no new matter is added.

Claims 24-26 are additionally amended. Paragraphs [0021] and [0027] are also amended. Figures 1 and 3 are further amended. Support for these amendments can be found in the originally filed specification at paragraph [0021], especially as detailed in Cheng et al., U.S. Pat. No. 7,076,659, entitled "Enhanced Method For Digital Data Hiding" and filed on February 25, 2002 by the assignee of the present invention. The aforementioned issued United States Patent is incorporated by reference at paragraph [0021] in the originally filed specification, and the statement of incorporation by reference is herein corrected in accordance with the procedure outlined in MPEP, Appendix R, Patent Rules § 1.57. The material being inserted in the specification and drawings is the material previously incorporated by reference. Thus, no new matter is added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

OBJECTIONS TO THE DRAWINGS

The drawings are objected to under 37 C.F.R. 1.83(a) for failing to show “taking the difference of every two consecutive samples ... without performing manipulation across pairs” and the use of formulas of claims 24-26. This objection is respectfully traversed.

Applicants have amended the drawing Figures 1 and 3 to include the equations of claims 24-26, and have amended the claims to replace the phrase, “taking the difference of every pair of two consecutive samples ... without performing manipulation across pairs,” with the phrase, “taking the difference of only every other pair of two consecutive samples.” The replacement phrase aptly describes the equation added to Figure 1. No new matter is added.

Accordingly, Applicants respectfully request that the objections to the drawings under 37 C.F.R. 1.83(a) be withdrawn.

OBJECTION TO THE SPECIFICATION

The specification stands objected to under 35 U.S.C. § 132(a) as containing new matter, especially where it does not support the claim limitation, “without performing manipulation across pairs” and lacks support for the equations of claims 24 and 26. This rejection is respectfully traversed.

Applicants have removed the claim limitation, “without performing manipulation across pairs.” Applicants have also corrected the incorporation by reference at paragraph [0021] in the originally filed specification in accordance with the procedure outlined in MPEP, Appendix R, Patent Rules § 1.57. Applicants have further inserted the equations of claims 24 and 26 into paragraph [0021]. The material being inserted in

the specification and drawings is the material previously incorporated by reference. Thus, no new matter is added.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the objection to the Specification under 35 U.S.C. § 132(a).

REJECTION UNDER 35 U.S.C. § 112

Claims 1-4, 7-14, 17, and 20-26 stand rejected under 35 U.S.C. § 112, first paragraph, for reciting “without performing manipulation across pairs” and for the equations of claims 24 and 26. This rejection is respectfully traversed.

Applicants have removed the claim limitation, “without performing manipulation across pairs.” Applicants have also corrected the incorporation by reference at paragraph [0021] in the originally filed specification in accordance with the procedure outlined in MPEP, Appendix R, Patent Rules § 1.57. Applicants have further inserted the equations of claims 24 and 26 into paragraph [0021]. The material being inserted in the specification and drawings is the material previously incorporated by reference. Thus, no new matter is added.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claims 1-4, 7-14, 17, and 20-26 under 35 U.S.C. § 112, first paragraph.

Claims 24-26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for reciting some undefined variables. This rejection is respectfully traversed.

Applicants have amended each of claims 24-26 to define all of the variables recited therein. Support for the amendments can be found in the originally filed specification at paragraphs [0021], [0023], and [0027].

REJECTION UNDER 35 U.S.C. § 103

Claims 1-4, 8-14, and 24-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Neubauer et al. ("Audio Watermarking of MPEG-2 AAC Bit Streams) in view of Cox et al. ("Secure Spread Spectrum Watermarking for Multimedia"), Birks et al. (US 6,373,530), Sprague (U.S. Pat. No. 4,617,645), and Brody et al. (U.S. Pat. No. 6,718, 501). This rejection is respectfully traversed.

Neubauer et al., Cox et al., Birks et al., Sprague, and Brody et al. fail to teach, suggest, or motivate constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in a sorted sequence while alternating the sign of every other difference value.

Applicant's claimed invention is generally directed toward embedding data in compressed audio data streams. In particular, Applicant's claimed invention is directed toward constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in a sorted sequence while alternating the sign of every other difference value. For example, independent claim 1, especially as amended, recites, "constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in the sorted sequence while alternating the sign of every other difference value." Independent claims 8 and 10, as amended, recite similar subject matter. Thus, the cited references do not teach, suggest, or motivate all of the limitations recited in the independent claims. These differences are significant because taking the difference of only every other pair of two consecutive samples avoids manipulation across pairs, thus avoiding significant error propagation to the signal in the original domain.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of independent claims 1, 8, and 10 under 35 U.S.C. § 103(a), along with rejection on these grounds of all claims dependent therefrom.

Claims 7, 17, and 20-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Neubauer et al. ("Audio Watermarking of MPEG-2 AAC Bit Streams) in view of Cox et al. ("Secure Spread Spectrum Watermarking for Multimedia"), Birks et al. (US 6,373,530), Sprague (U.S. Pat. No. 4,617,645), Brody et al. (U.S. Pat. No. 6,718, 501), and Smyth et al. (U.S. Pat. No. 5,974,380). This rejection is respectfully traversed.

Neubauer et al., Cox et al., Birks et al., Sprague, Brody et al., and Smyth et al. fail to teach, suggest, or motivate constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in a sorted sequence while alternating the sign of every other difference value.

Applicant's claimed invention is generally directed toward embedding data in compressed audio data streams. In particular, Applicant's claimed invention is directed toward constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in a sorted sequence while alternating the sign of every other difference value. For example, independent claim 1, especially as amended, recites, "constructing a new partially decoded data stream by taking the difference of only every other pair of two consecutive samples in the sorted sequence while alternating the sign of every other difference value." Independent claim 10, as amended, recites similar subject matter. Thus, the cited references do not teach, suggest, or motivate all of the limitations recited in the independent claims. These

differences are significant because taking the difference of only every other pair of two consecutive samples avoids manipulation across pairs, thus avoiding significant error propagation to the signal in the original domain.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of dependent claims 7, 17, and 20-23 under 35 U.S.C. § 103(a) in view of their dependence from allowable base claims.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: _____

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